

REMARKS

Claims 1-8 remain in this application. Claim 9 has been cancelled. Claims 1-8 have been amended. Claims 10-17 have been added.

Referring to section 1 of the Office Action, the Examiner is asked to admit to the application a new sheet 4 of the drawings depicting a new figure (Figure 7) to be incorporated into the application. New Figure 7 is based on Figure 6 as filed but differs therefrom in that it identifies the feature of the invention that the auxiliary spring means may comprise a hydraulic, a hydro-pneumatic, an electro-mechanical or a manual mechanical spring means 40. It is respectfully submitted that the incorporation of this new figure into the application does not constitute the addition of new matter in that the new figure merely serves to illustrate that which is taught in the application.

Referring to section 2 of the Office Action, the Examiner will note from replacement pages 1 and 2 of the drawings that each of Figures 1 to 5 have been amended to include below their figure designation the legend "Prior Art".

It is believed that the proposed amendments to the drawings detailed in the last two preceding paragraphs address the Examiner's objections to the drawings as filed.

In response to sections 3 and 4 of the Office Action, the applicant proposes replacement wording for the abstract which addresses the Examiner's objections and is consistent with MPEP Section 608.01(b).

In section 5 of the Office Action, the Examiner has asked that the specification as filed be amended to incorporate headings to the different sections of the specification. The Examiner will note that several of the requests for amending the specification as detailed in the "In the Specification" section to the amendments above address this issue. In addition, the applicant has taken this opportunity to incorporate into the specification at page 5, lines 14 to 16 a designation of new Figure 7 and, at page 9, lines 20 to 29, an amended description to render the detailed description part of the specification consistent with the incorporation of new Figure 7 of the drawings.

Referring now to sections 7 through to 14 of the Office Action, the Examiner will find that the formality objections mentioned in section 8 through 11 are attended to by the proposals for amending the claims in response to the substantive grounds of rejection set out in sections 13 and 14 of the Office Action.

Referring to the substantive grounds of rejection, the Examiner contends that each of independent claims 1 and 3 are anticipated by either of Hedenberg et al (US 5,351,986) or Orndorff et al (US 5,007,660).

The claims of the present application as filed have been amended in a manner believed to patentably distinguish the present invention over the prior art of record including the multiplicity of prior art references cited against this application but not relied on in this Office Action. In summary, of claims 1 to 9 as originally filed, independent claims 1 and 3 have been amended as have dependent claims 2 and 4 to 8. Claim 9 has been cancelled. New claims 10 to 17 are added. Of the new claims, only claim 10 is an independent claim.

Independent claims 1, 3 and 10 as now submitted for the Examiner's consideration distinguish the present invention over the various arrangements disclosed in the prior art of record in that the suspension system of the invention has a leaf spring arrangement comprising an upper leaf spring and a lower leaf spring wherein one end of each of said upper and lower leaf springs comprises a connection means for attachment of the leaf spring assembly to an associated vehicle chassis, wherein the lower leaf spring is mounted or mountable over the associated vehicle axle with an opposite end thereof forming a further connection means for attachment of the leaf spring assembly to the associated vehicle chassis and wherein an auxiliary spring means is mounted in series with the upper leaf spring of the leaf spring assembly. This arrangement provides a suspension system for a vehicle with the ride characteristics and dynamic deflection geometry substantially the same as that of a conventional leaf spring system and which mimics the dynamic deflection geometry of said conventional leaf spring system around the normal loading range in contrast particularly with the prior art arrangement described in the

present application and depicted by Figure 3 of the drawings thereof. In this prior art arrangement, the leaf spring assembly is attached at one end to the associated vehicle chassis and an auxiliary spring means is mounted to both the upper and lower leaf springs at an opposite end of said assembly. This arrangement is such that an end of the lower leaf spring opposite to that of the connection end of the leaf spring assembly to the associated vehicle chassis is not able to be separately attached to said chassis as in the present invention as now claimed. The disadvantages of this prior art arrangement are fully explained in the specification of the present application.

Hedenberg discloses a suspension system for a vehicle including a leaf spring assembly having upper and lower leaf springs. In this arrangement, the leaf spring assembly is pivotally connected at one end to a vehicle frame and at another end to a trailing arm bracket 47. The trailing arm bracket is disclosed as being positioned either adjacent and just below or directly below an associated vehicle axle. This arrangement is said to be advantageous in that it allows placement of auxiliary spring means (in the form of an air spring 33) closer to a pivot point 43 adjacent to the associated vehicle axle. As such, no part of the leaf spring assembly is mounted over the associated vehicle axle. This contrasts with the present invention in which (at least) the lower leaf spring is mountable over the associated vehicle axle. It is clear therefore that the arrangement disclosed in Hedenberg does not anticipate that as now claimed in the current application. Further, the air spring 33 is connected to the leaf spring assembly such that it is connected directly through all of the leaf springs forming the assembly in contrast with the present invention in which the auxiliary spring means is mounted only on the upper leaf spring.

It is inconceivable that one skilled in the art would be motivated to modify the arrangement of Hedenberg to arrive at that of the present invention given the above described differences but also bearing in mind that Hedenberg discloses that it is desirable to mount the air spring 33 on the leaf spring assembly close to the leaf spring assembly's pivot point adjacent the associated vehicle axle. This teaches away from the arrangement of the present invention.

Orndorff also discloses a suspension system for a vehicle employing a leaf spring assembly, in which the leaf spring assembly includes at least upper and lower leaf springs which are mounted over the associated vehicle axle. However, it can be seen from Orndorff that the leaf spring assembly is connected at one end to the associated vehicle chassis in a manner similar to that of the present invention and indeed of other known arrangements but that the leaf spring assembly is connected at its opposite end to the vehicle chassis by the upper leaf spring through a torsional spring assembly (auxiliary spring means) (28). Therefore, in this arrangement, the manner by which the leaf spring assembly is connected to the vehicle chassis contrasts with that of the present invention in which the leaf spring assembly at its opposite end is connected to the vehicle chassis via the lower leaf spring only leaving the opposite end of the upper leaf spring available for separately mounting on it the auxiliary spring means. Consequently, the arrangement disclosed in Orndorff is, in principle, the same as that depicted as prior art in Figure 3 of the present application and thus suffers from much the same disadvantages. It cannot therefore be maintained that Orndorff discloses a vehicle suspension system which anticipates that of the present invention. Equally, since Orndorff presents disadvantages which the present invention is designed to overcome, it cannot be suggested that one skilled in the art would be motivated to modify Orndorff to arrive at the arrangement of the present invention.

In view of the foregoing, applicant asserts that the present invention as now defined by independent claims 1, 3 and 10 patentably distinguish the present invention over the prior art. Claims 2, 4-8, and 11-17, as depending from allowable independent base claims, are themselves also allowable.

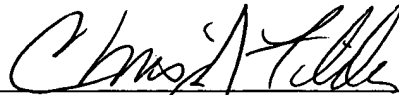
This amendment and request for reconsideration is felt to be fully responsive to the comments and suggestions of the Examiner and to present the claims in condition for allowance. Favorable action is requested.

U.S. Serial No. 10/049,157 -- 16

Respectfully submitted,

Michael Franklin Glass

Fildes & Outland, P.C.

A handwritten signature in black ink, appearing to read "Chris J. Fildes", written over a horizontal line.

Christopher J. Fildes, Attorney

Registration No. 32,132

20916 Mack Avenue, Suite 2

Grosse Pointe Woods, MI 48236

(313) 885-1500